

Polymers with New Sequence Distributions**ABSTRACT**

The invention relates to new polymerization processes including diluents including hydrofluorocarbons and their use to produce novel polymers with new sequence distributions. In particular, the invention relates to copolymers of an isoolefin, preferably isobutylene, and a multiolefin, preferably a conjugated diene, more preferably isoprene, with new sequence distributions.